

CONCORDIA UNIVERSITY

Council of the Faculty of Engineering and Computer Science

Minutes of Meeting 2005-02

held

Friday, April 22, 2005, 2:00 p.m., H-769

Present:	N. Esmail (Chair)	T. Fancott	S. Mudur
	M.O. Ahmad	W. Ghaly	C. Paradisis
	S.T. Alkass	L. Harris	M.D. Pugh
	B. Ashtakala	I. Hassan	L. Quesnel
	S. Bergler	S.V. Hoa	A. Ramamurthy
	R. Bhat	N. Howe	Y.R. Shayan
	J. Covey	F. Khendek	M. Singer
	M. Debbabi	C. Lam	M.R. Soleymani
	K. Demirli	H.F. Li	C.W. Trueman
	M. Di Pietrantonio (Sec.)	W.E. Lynch	M. Zaheeruddin
	R. Dssouli	B. Mackenzie	R.G. Zmeureanu

Observers: R. Melkonian L. Zack

Regrets:	T. Fevens	J. Jasinski	Q. Li
	S. Ghaderpanah	E. Levi	A. Limoges
	M.R. Hajiaboli	A. Lew	R. Mizouni

1. Adoption of Agenda

Motion *That the Agenda be adopted, as submitted (R. Bhat, L. Quesnel)*

2005-02-01

Vote: *Carried unanimously*

2. Adoption of the Minutes of Meeting 2005-01

Corrections:

- Page 5; last paragraph; first line: Currently, the minutes read as follows:
One problem with the current UWSR regime is that there is nothing a student cannot do if they have not completed the UWSR, except graduate.

Dr. Lynch clarified this sentence by re-wording it as follows:

One problem with the current UWSR regime is that a student may complete all other requirements for his/her degree even though the UWSR is not satisfied. Thus the UWSR is a defacto graduation requirement.

- Page 7; Motion 2005-01-05:
Corrected misspelling from C. Lami to C. Lam.

Motion ***That the Minutes of Meeting 2005-01 (February 18, 2005) be adopted,***
2005-02-02 ***as corrected (W.E. Lynch, M. Pugh)***

Vote: Carried unanimously

3. **Chair's Remarks**

New Building: The Chairman stated that moving into the Integrated Engineering, Computer Science and Fine Arts Complex represents a landmark event in the history of the Faculty. Although disruptive, the Chairman urged Council members not to let the act of moving cloud the excitement involved with having acquired a new, respectable home for the Faculty of ENCS.

Staff Excellence Awards: This year marked the induction of the staff recognition awards. In addition to the recipients of the Staff Excellence Award, in the office and technical support categories, 39 staff members were recognized for their outstanding service.

Faculty members were asked to nominate staff in their respective department, based on a set of criteria (i.e. level of dedication to job). The winners received either a Tier I or Tier II award. Intended to foster a dynamic work relationship between faculty members and staff, the Chairman remarked that this initiative proved to be successful. However, since neither the staff in the Office of the Dean, nor Student Academic Services, provide direct support to faculty members, they could not be considered for a recognition award. However, the Chairman advised that although faculty members are not affiliated with these offices, a means to recognize outstanding staff members in would be determined for the next academic year.

Enrollment: The Chair re-iterated the considerable drop in FTE's sustained by the Faculty of ENCS during the academic year 2004/05. All indication points towards a spectacular decline in FTE's for the year 2005/06. The Chair stated that many factors are involved – some relate to national trends, others are market-driven. However, the one factor internal to ENCS involves the Faculty's recommendation to Concordia to institute the University Writing Test (UWT). Although the intention was to improve the linguistic ability of ENCS students, administrators of the UWT aimed to improve English proficiency in CEGEPs and across Canada. The Chairman stated that the Faculty's mandate is to improve the level of the language proficiency of ENCS students so that they are apt to function in their jobs upon graduation. Statistics indicate that 50% of CEGEP students fail the UWT. As a

result, students are required to prolong their studies at Concordia by half a year in order to register for and pass courses in English as a Second Language (ESL) and English literature. Consequently, word of Concordia's UWT requirement traveled across the Quebec's CEGEPs. Since neither McGill nor any of the other engineering faculties in Montreal have this requirement, the Chairman attributes the steeper part of the Faculty's declining enrollment to the UWT. Although ENCS was successful at implementing a different course of action, the Senate has maintained its decision to keep the UWT as an option for incoming students. At this time, the Faculty's main objective is to restore its reputation within the CEGEPs, and promote the University's accessibility to college students in Montreal, including the allophones who wish to study engineering or computer science at Concordia.

The Chairman stated that other factors contributing to the decline in enrollment involve the extent to which faculty members accept graduate research students, including those in graduate course programs.

The Chairman remarked that the new building was the product of the Faculty's arduous effort to increase enrollment. Accordingly, both the Minister of Quebec and the University recognized this feat. Currently, cascading enrollment figures will seriously impact future demands made by the Faculty with regards to space, and the hiring of additional faculty/staff members, to name a few. For instance, since the new building cannot accommodate the entire faculty, the request for additional space will be difficult to substantiate if the Faculty remains in a state of declining enrollment.

According to the Chairman, quality will not be compromised by any means. As well, we cannot afford to limit access to certain programs. The Chair advised Council members to be cognizant of declining enrollment and its direct impact on all faculty and staff members. In the meantime, the Chair requested the Faculty's co-operation in overcoming minor obstacles that may impede enrollment figures from escalating.

4. **Undergraduate Curriculum Changes – Department of CSE** **(ECFC Doc. 2005-02-01A)**

Dr. Lynch presented **ECFC Document 2005-02-01A** outlining the following proposed curriculum changes for the Department of Computer Science and Software Engineering (CSE), for the academic year 2005/06:

- (i) Restrict graduate courses that can be taken by undergraduate students; allowing BCompSc students to take some Software Engineering courses as electives.
- (ii) Add a course in principles of programming languages to BCompSc options in order to satisfy CASC requirements.
- (iii) Add a service course in database applications for students not in a BCompSc program.

- (iv) Add a course in human-computer interaction as an elective for BCompSc students.

Motion *That the proposed undergraduate curriculum changes for the Department of
2005-02-03 Computer Science and Software Engineering, set out in ECFC Document
2005-02-01A, be approved by Council (C. Lam, M. Pugh)*

Vote: *Carried unanimously*

Undergraduate Curriculum Changes – Department of ECE
(ECFC Doc. 2005-02-01B)

Dr. Lynch introduced **ECFC Document 2005-02-01B** including the following proposed curriculum course and program changes for the Department of Electrical and Computer Engineering (ECE), for the academic year 2005/06.

COEN 352 *Data Structures and Algorithms* has been removed from the Electrical Engineering core and added to the Telecommunications Option electives, and to the Electronics/Systems electives under Computer Systems.

- **COMP 346** *Operating Systems*
- **COMP 353** *Databases*
- **COMP 442** *Compiler Design*
- **COMP 465** *Design and Analysis of Algorithms*
- **COMP 471** *Computer Graphics*
- **COMP 472** *Artificial Intelligence*
- **COMP 474** *Introduction to Expert Systems*

COEN 352 *Data Structures and Algorithms* has been added as a possible pre-requisite to the seven COMP courses listed above, which are also taken by students in the Electrical and Computer Engineering B.Eng. program. **COEN 352** covers the necessary material to serve as a pre-requisite for these courses.

The Department has a new Network teaching laboratory to help students better understand the concepts of basic and advanced telecommunication networks. The lab will provide the students with hands-on experience with current state-of-the-art network equipment. The change reflects the addition of a 3-hour lab per week, given on alternate weeks, with a corresponding change in credit value.

ELEC 472 is currently an elective in the Electrical Engineering program. Proposed program change reflects the inclusion of **ELEC 472** as an elective under both options for the Computer Engineering program. Computer Engineering students have the required pre-requisites and will equally benefit from the course. Computer Engineering has other courses in network areas, such as Network Security and Management with similar prerequisites as **ELEC 472**, also listed as electives in both options.

Either **COMP 352** or the new course, **COEN 352**, will cover the necessary material to serve as a prerequisite for this course.

COMP 346 *Operating Systems* has been replaced by **COEN 346** as reflected in Electrical Engineering Telecommunications Option and Electronics/Systems Electives under Computer Systems, and in our Computer Engineering core.

The focus of this course is on the use of Real-time (operating) systems in/for engineering applications. To address CEAB concerns, this course is to be offered and taught in the ECE Department.

The resource implications are minimal as ECE has enough students to fill a section of this course, putting less demand on **COMP 346**.

COEN 320 *Introduction to Real-time Systems*
COEN 445 *Communications Networks and Protocols*
ELEC 465 *Networks Security and Management*

The possibility of **COEN 346** as a prerequisite for the courses listed above has been reflected in the addendum to **ECFC Doc. 2005-02-01B**.

Motion *That the proposed undergraduate curriculum changes for the Department of*
2005-02-04 *Electrical and Computer Engineering, set out in ECFC Document*
 2005-02-01B and the addendum, be approved by Council
 (W.E. Lynch, M.O. Ahmad)

Vote: Carried unanimously

5. **ECP/MEP/CEGEP Requirements (ECFC Doc. 2005-02-03)**

Dr. Lynch presented **ECFC Document 2005-02-03** outlining two major changes to the Faculty's entrance requirements for Engineering programs:

The Electrical and Computer Engineering programs had required that in addition to the CEGEP profile required of all other engineering programs, ECE would also require Physics 301 or NYC which has Concordia course number PHYS 206 Waves and Modern Physics. This course was also required by these two programs in the Extended Credit Program (ECP) and Mature Entry Program (MEP). At some point, the Software Engineering program had also required this extra course, but then had decided to delete it. Unfortunately, they only deleted it from the ECP profile and not from the CEGEP or MEP profile.

The decision was taken that this course was not required for any of the Faculty's engineering programs, and thus it is deleted from all of them for all profiles.

The second change revolved around a review of the courses required of our ECP and MEP students to see if all were required. According to the decision made by the Undergraduate Studies Committee, COMP 201, PHYS 224 and PHYS 225 are not required of our ECP/MEP students. Thus, these courses are deleted from the MEP and ECP entrance profiles of all our Engineering programs.

Motion ***That the Extended Credit Program (ECP), Mature Entry Program (MEP) and CEGEP requirements set out in ECFC Document 2005-02-03, be approved by Council (W.E. Lynch, M. Pugh)***
2005-02-05

Vote: Carried unanimously

6. Code of Conduct – Consultation Draft (ECFC Document 2005-02-02)

Dr. Lynch advised that a summary of the changes (listed below) in the Code of Conduct (Academic) proposed by the Council of the Faculty of ENCS was added to ECFC Document 2005-02-02.

- i. *The requirement for students to complete the Faculty of Engineering and Computer Science's "Expectation of Originality" should be integrated into the Code.*
- ii. *The word "knowingly" should be deleted from **Article 14** and **Article 15** should be dropped.*
- iii. *If suggestion 2 above is not taken, students should be required to sign something prior to each final exam stating that they understand what their obligations are under the Code and that they are not violating them.*
- iv. *Two additional offenses should be added under **Article 17**:*
 - *If a student continues writing after an exam is over, it should be an offense.*
 - *Lying in the interview or before an Academic Hearing Panel should be an offense.*
- v. ***Article 33b** should be deleted. (This article lists sanctions and suggests that resubmission of work is a possible sanction.)*
- vi. *Similar to suggestion 6, **Article 50b** should be deleted.*
- vii. ***Article 52** should not be altered but remain as it presently is in the Code. (This article currently suggests that the normal penalty for a second offense is expulsion, subject to confirmation by the Provost. The suggestion by the Committee recommending changes to the Code is that expulsion is only appropriate on a third offense. The Faculty's Undergraduate Studies Committee sees no benefit to this suggestion.)*
- viii. *Similar to suggestion 7, **Article 64** should not be altered but remain as it presently is in the Code.*

- ix. **Article 65:** Instead of “their”, it should read “his/ her”.
- x. **Appendix A** should include a signature line to be signed by the person filing the Incident Report.

The following comments were made by Dr. Bhat, but were not incorporated into the resolution passed by Faculty Council.

- i. **Article 1** mentions the instructor student relationship and then emphasizes that students are expected to be honest in their academic endeavors and relationships with the university. It was thought that some mention should be made of the responsibilities of the instructor. It was suggested that a reference to BD-4 Concordia University Code of Ethics – Guidelines for Ethical actions would be appropriate.
- ii. It was thought that the penalty laid out in **Article 33c and 50c** (reduction of up to 25% of the students grade) is arbitrary. Also while a failing grade, or the requirement to take additional credits has at least some positive components, a grade reduction does not. It was suggested that these two sub-articles be deleted.

Motion 2005-02-06 **That the Council of the Faculty of Engineering and Computer Science adopt the final page of ECFC Document 2005-02-02 (W.E. Lynch, C. Trueman)**

Vote: Carried unanimously

7. Concordia’s 5-year Academic Plan (ECFC Document 2005-02-09)

- Presentation notes pending Provost’s approval

8. Graduate Curriculum Changes – Dept of MIE (ECFC Doc. 2005-02-04)

Dr. Bhat moved **ECFC Document 2005-02-04** proposing the implementation of the following program change and new course in the academic year 2005-2006.

Program Change:

- (i) reflects the addition of **ENGR 6191 Introduction to Biomedical Engineering** in Topic area E05 – *Dynamics and Vibrations of Mechanical and Biomechanical Systems*.

Motion 2005-02-07 **That the proposed graduate curriculum change for the Department of Mechanical and Industrial Engineering, set out in ECFC Document 2005-02-04, be approved by Council (R. Bhat, C. Lam)**

Vote: Carried unanimously

Doctoral Seminar (ECFC Doc. 2005-02-05)

Dr. Bhat moved **ECFC Document 2005-02-05** proposing the implementation of the following course change in the 2005/06 academic year.

Course Change(s):

- (i) Course description changes to the Doctoral Seminar **ENCS 8011 *Ph.D. Seminar.***

Proposed amendments:

- Change proposed text to read as follows:
The student's evaluation, reflected by either a pass or fail grade, is based upon attendance in all seminars, a report on the student's thesis research under the direction of the thesis supervisor(s), and a presentation.
- Remove the note from the proposed text.
- Specify that the proposal Course number XXXX be added as a pre-requisite to the first line of text.
- Add the following text:
The PhD Seminar is designed to train students to communicate and participate in research discussion, the results of their research projects to the community.

Motion ***That the course description for the doctoral seminar set out in ECFC***
2005-02-08 ***Document 2005-02-05, be approved by Council, as amended***
 (R. Bhat, W.E. Lynch)

Vote: Carried unanimously

9. **Slot Courses - Dept of CSE (ECFC Doc. 2005-02-06A)**

Dr. Bhat moved **ECFC Document 2005-02-06A** recommending that the following slot courses for the Dept. of CSE be implemented in the 2005-2006 academic year.

- (i) Introduction of a slot course **COMP 691X *Multimedia Computing***

Changes required to the proposed text:

- Add the phrase "A project" at the end of the course description.
- **COMP 691** should read **COMP 691X *Multimedia Computing***

- (ii) Introduction of a slot course **COMP 691X** *Alchemy and Real-time Media*

Correct typo in proposed text to read:

- The course is offered in a seminar format and is designed to draw participants from multiple disciplines to work with real-time media synthesis technologies of performance.
- **COMP 691** should read **COMP 691X** *Alchemy and Real-time Media*

Motion *That the graduate curriculum changes pertaining to slot courses for the*
2005-02-09 *Department of Computer Science and Software Engineering, set out in ECFC*
 Document 2005-02-06A, be approved by Council, as amended
 (R. Bhat, C. Lam)

Vote: Carried unanimously

10. Slot Course - Dept of ECE (ECFC Doc. 2005-02-06B)

Dr. Bhat moved **ECFC Document 2005-02-06B** recommending that the following slot course for the Department of ECE be implemented in the 2005-2006 academic year.

- (i) Introduction of a slot course **ELEC 691X** *High Frequency Techniques in Electromagnetics*

Changes required to the proposed text:

- Add the phrase “A project” at the end of the course description.

Motion *That the graduate curriculum change pertaining to a slot course for the*
2005-02-10 *Department of Electrical and Computer Engineering set out in ECFC*
 Document 2005-02 06B, be approved by Council, as amended
 (R. Bhat, M.O. Ahmad)

Vote: Carried unanimously

11. New Master Programs in Industrial Engineering

Dr. Bhat introduced the following proposed new Master Programs in Industrial Engineering for recommendation of their implementation in the 2006/2007 academic year, as well as for their entry in the 2006/07 Graduate Calendar.

- 45-credit MEng Program in Industrial Engineering
- 45-credit MASc Program in Industrial Engineering

Proposed New MEng Program in Industrial Engineering
(ECFC Doc. 2005-02-07)

ECFC Document 2005-02-07 contains the modified program proposal and the calendar update forms for 2006/2007 graduate calendar, as recommended by the SGS Curriculum Committee:

1. Cover document (main program proposal and appendices 1-7)
2. Calendar update forms for editorial changes to the MIE section of the Graduate Calendar to accommodate the new master's program. Please also note that MEng (Aerospace) program has been moved to a new location
3. Calendar update forms for the description of the new Master of/Magisteriate in Engineering (Industrial Engineering) program
4. Calendar update forms for editorial changes to the Graduate Certificates section of the Graduate Calendar to accommodate the new master's program
5. Calendar update forms for the deletion of Graduate Certificate in Software Systems for Industrial Engineering
6. Calendar update forms for the changes to the Engineering Courses section:
 - 6.1. Changes to Area E01:
 - 6.1.1 ENCS 6151 and ENGR 6111 *deleted* from E01 (and *moved* to E12)
 - 6.2. Changes to Area E12:
 - 6.2.1 Added INDU 6111 (was ENCS 6151 in E01)
 - 6.2.2 Added INDU 6131 (was ENGR 6111 in E01)
 - 6.2.3 *Added* INDU 6211 (new course)
 - 6.2.4 *Added* INDU 6331 (new course)
 - 6.2.5 ENCS 6211 Theory and Applications of Operations Research *changed to* INDU 6121 Advanced Operations Research
 - 6.2.6 ENCS 6201 *changed to* INDU 6231
 - 6.2.7 ENGR 6401 *changed to* INDU 6421
 - 6.2.8 ENGR 6451 *changed to* INDU 6351
 - 6.2.9 ENGR 6491 *changed to* INDU 6311
 - 6.2.10 MECH 6251 *changed to* INDU 6411
 - 6.2.11 MECH 6461 *changed to* INDU 6341
 - 6.3. Changes to individual courses
 - 6.3.1 ENCS 6151 Discrete Optimization changed to INDU 6111 Theory of Operations Research
 - 6.3.2 ENCS 6201 changed to INDU 6231
 - 6.3.3 ENCS 6211 changed to INDU 6121
 - 6.3.4 ENGR 6111 changed to INDU 6131
 - 6.3.5 ENGR 6401 changed to INDU 6421
 - 6.3.6 ENGR 6451 changed to INDU 6351
 - 6.3.7 ENGR 6491 changed to INDU 6311
 - 6.3.8 ENGR 7011 Graduate Seminar in Mechanical Engineering changed to ENGR 7011 Graduate Seminar in Mechanical and Industrial Engineering

- 6.3.9 **ADD** INDU 6211 Production Systems and Inventory Control
- 6.3.10 **ADD** INDU 6311 Advanced Quality Control
- 6.3.11 MECH 6251 **change to** INDU 6411
- 6.3.12 MECH 6461 **change to** INDU 6341

- 7. CV's of IE Professors (Appendix 8 was only included in electronic version of document)

Proposed New MASc Program in Industrial Engineering
(ECFC Doc. 2005-02-08)

ECFC Document 2005-02-08 outlines the modified Program Proposal and the Calendar update forms for the 2006-2007 Graduate Calendar. The modifications are based on the recommendations of the SGS Curriculum Committee.

- 1. Cover Document (main program proposal and appendices 1-7)
- 2. Calendar update forms for the description of the new Master of/Magisteriate in Applied Science (Industrial Engineering) program
- 3. CV's of IE Professors (Appendix 8 was included in the electronic version of ECFC Document 2005-02-08 ONLY)

Motion 2005-02-11 That the proposed new MEng and MASc programs in Industrial Engineering, set out in ECFC Document 2005-02-07 and ECFC Document 2005-02-08 respectively, be approved by Council (R. Bhat, S.V. Hoa)

Vote: Carried unanimously

12. Other Business

There was no other business to report.

13. Adjournment

The meeting was adjourned at 5:30 p.m.

Mary Di Pietrantonio
Secretary of Council